

Exercise 8: Resource Constraints

Compile your project code so it prints out the heap pointer and the stack pointer. Also, print out addresses to:

- An initialized global variable
- An uninitialized global variable
- A static variable inside a function
- A variable inside a function

Do these variables seem like they are in sensible places given the map file?

If you can find it, modify your linker file to swap your uninitialized variables and initialized variables. Verify it is as expected in the memory map. See how that changes your code output.

Turn in your notes on what you found to Discord #assignment-submission by Live Class on Saturday.

Bonus: One student in a previous cohort printed out all of the variables in the map file that started with double underscores (dunders). Try that (<u>hint</u>). Do the variable addresses and the linker file make more sense given these?